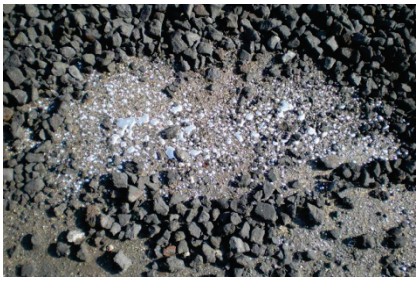
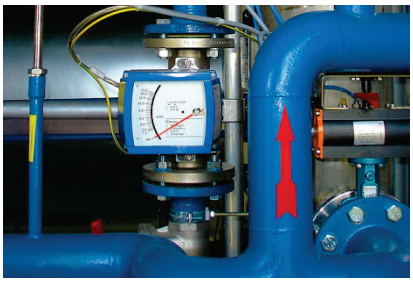
Mercury recovery

Applications and design

Process:	Indirect Heated Vacuum Thermal Desorption / Vacuum Distillation
Source:	By-product from industrial processes, e.g. Chloralkali electrolysis Contaminated sludge from natural gas drilling, oil and gas NORM Residues from fungicidal production, wood impregnation, amalgamation or recycled fluorescent tubes Contaminated production sites and building rubble
Input material:	Sludge and filter cake of varying viscosities Solids, soil, dust, debris, filtration residues, sediments





Key facts

Heating system:	Thermal oil with temperatures up to 400 °C
Fired by:	Fuel oil, diesel, natural gas, biofuels
Operating pressure:	< 50 mbar absolute pressure
Hg-concentration output:	Below 10 ppm, 1 ppm possible
Purity of recovered Hg:	> 97 %, 99,999 % possible
Treatable by-products:	VOC, POP, lubricants, water
Plant design:	Fixed or mobile installation, 0.5 … > 10 t/h throughput capacity
Optional:	Remoistening, cooling and stabilisation of cleaned solid output

Greatest benefits of the VacuDry technology

- Environmentally friendly separation of reusable mercury
- Separately recovered contaminants by fractional condensation
- High temperatures and low vacuum to ensure an in-depth cleaning effect
- Lowest energy consumption assured through controlled power requirements
- No downstream exhaust gas treatment required
- Emission and dust free system by encapsulated treatment of exhaust vapours and solids
- Treatment of waste with low natural radioactivity possible

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